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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,046	07/14/2003	Seung-Jae Han	4-4	6070

7590 05/17/2005

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER	
NGUYEN, KHAI MINH	
ART UNIT	**PAPER NUMBER**
2687	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,046	HAN ET AL.	
	Examiner	Art Unit	
	Khai M Nguyen	2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,7,8,11-14,16,18,19,22,23,25,27,29,31,32 and 35* is/are rejected.

7)☒ Claim(s) *4, 6, 9-10, 15, 17, 20-21, 24, 26, 28, 30, 33-34, and 36* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/9/03, 12/20/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The references listed in the Information Disclosure Statement filed on October 9, 2003 and December 20, 2004 have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-3, 5, 7-8, 11-14, 16, 18-19, 22-23, 25, 27, 29, 31-32, and 35** are rejected under 35 U.S.C. 102(b) as being anticipated by Brody et al. (U.S.Pat-4670899).

Regarding claim 1, Brody teaches a method for calculating a transmission characteristic threshold for use in assigning a user to one layer in a plurality of layers in a wireless communications network (fig.1-2, abstract), said method comprising:

calculating a first balancing metric based on an operating characteristic of said first layer (fig.5a-5b, col.7, lines 4-24, col.11, lines 14-33, col.15, lines 26-45),

calculating a second balancing metric based on an operating characteristic of said second layer (fig.5a-5b, col.7, lines 4-41, col.11, lines 14-33, col.15, lines 26-45), and

adjusting said transmission characteristic threshold in response to the value of said first balancing metric relative to said second balancing metric (col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 2, Brody teaches the method of claim 1 further comprising the step of assigning said user to a layer in response to the value of a first user transmission characteristic of a transmission from said user relative to said adjusted transmission characteristic threshold (col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 3, Brody teaches the method of claim 1 wherein said transmission characteristic threshold is a threshold corresponding to the size of the data to be transmitted to or from said user (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 5, Brody teaches the method of claim 1 wherein said transmission characteristic threshold is a threshold corresponding to the velocity of said user (col.6, lines 43-56, col.7, lines 4-24).

Regarding claim 7, Brody teaches the method of claim 1 wherein said first operating characteristic corresponds to an average number of users (fig.13, col.24, lines 6-28, col.25, line 50 to col.26, line 7).

Regarding claim 8, Brody teaches the method of claim 1 wherein said first operating characteristic corresponds to the expected system load as seen by said user (col.7, lines 4-41).

Regarding claim 11, Brody teaches the method of claim 8 wherein said first balancing metric is determined by calculating the number of users in the first layer of said network and said second balancing metric is determined by calculating the number of users in said second layer of said network (col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 12, Brody teaches apparatus for calculating a transmission characteristic threshold for use in assigning a user to one layer in a plurality of layers in a wireless communications network (fig.1-2, abstract), said apparatus comprising:

means for calculating a first balancing metric based on an operating characteristic of said first layer (fig.5a-5b, col.7, lines 4-24, col.11, lines 14-33, col.15, lines 26-45);

means for calculating a second balancing metric based on an operating characteristic of said second layer (fig.5a-5b, col.7, lines 4-24, col.11, lines 14-33, col.15, lines 26-45); and

means for adjusting said transmission characteristic threshold in response to the value of said first balancing metric relative to said second balancing metric (col.6, lines

16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 13, Brody teaches the apparatus of claim 12 further comprising means for assigning said user to a layer in response to the value of a first user transmission characteristic of a transmission from said user relative to said adjusted transmission characteristic threshold (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 14, Brody teaches the apparatus of claim 12 wherein said transmission characteristic threshold is a threshold corresponding to the size of the data to be transmitted to or from said user (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 16, Brody teaches the apparatus of claim 12 wherein said transmission characteristic threshold is a threshold corresponding to the velocity of said user (col.6, lines 43-56, col.7, lines 4-24).

regarding claim 18, Brody teaches the apparatus of claim 12 wherein said first operating characteristic corresponds to an average number of users (fig.13, col.24, lines 6-28, col.25, line 50 to col.26, line 7).

Regarding claim 19, Brody teaches the apparatus of claim 12 wherein said first

operating characteristic corresponds to the expected system load as seen by said user (col.7, lines 4-41).

Regarding claim 22, Brody teaches the apparatus of claim 18 wherein said first balancing metric is determined by calculating the number of users in the first layer of said network and said second balancing metric is determined by calculating the number of users in said second layer of said network (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 23, Brody teaches an assignment manager for assigning a user to one layer in a plurality of layers in a wireless communications network (fig.1-2, abstract), said assignment manager (fig.1-2, element 20) comprising:

a first circuit for calculating a first balancing metric based on an operating characteristic of said first layer (fig.5a-5b, col.7, lines 4-24, col.11, lines 14-33, col.15, lines 26-45);

a second circuit for calculating a second balancing metric based on an operating characteristic of said second layer (fig.5a-5b, col.7, lines 4-24, col.11, lines 14-33, col.15, lines 26-45); and

a third circuit for adjusting a transmission characteristic threshold in response to the value of said first balancing metric relative to said second balancing metric (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 25, Brody teaches the assignment manager of claim 23 further comprising a fourth circuit for assigning said user to a layer in response to the value of a first user transmission characteristic of a transmission from said user relative to said adjusted transmission characteristic threshold (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 27, Brody teaches the assignment manager of claim 23 wherein said transmission characteristic threshold is a threshold corresponding to the size of the data to be transmitted to or from said user (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Regarding claim 29, Brody teaches the assignment manager of claim 23 wherein said transmission characteristic threshold is a threshold corresponding to the velocity of said user (col.6, lines 43-56, col.7, lines 4-24).

Regarding claim 31, Brody teaches the assignment manager of claim 23 wherein said first operating characteristic corresponds to an average number of users (fig.13, col.24, lines 6-28, col.25, line 50 to col.26, line 7).

Regarding claim 32, Brody teaches the assignment manager of claim 23 wherein said first operating characteristic corresponds to the expected system load as seen by said user (col.7, lines 4-41).

Regarding claim 35, Brody teaches the assignment manager of claim 32 wherein said first balancing metric is determined by calculating the number of users in the first layer of said network and said second balancing metric is determined by calculating the number of users in said second layer of said network (abstract, col.6, lines 16-30, col.18, line 66 to col.19, lines 48).

Allowable Subject Matter

3. Claims **4, 6, 9-10, 15, 17, 20-21, 24, 26, 28, 30, 33-34, and 36** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Citation of Pertinent Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kallin et al. (U.S.Pat-5701585) discloses Mobile assisted handoff.

Lemson (U.S.Pat-5655217) discloses Spectrum sharing communications system for monitoring available spectrum.

Parantainen et al. (U.S.Pat-6456844) discloses Method for admission control in interference-limited cellular radio network.

Hutcheson et al. (U.S.Pat-5551059) discloses Method and system for intelligent cell selection using Doppler data in cellular system.

Jensen et al. (U.S.Pub-20020018554) discloses Call management system using fast response dynamic threshold adjustment.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571.272.7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khai Nguyen
Au: 2687

5/9/2005

5/11/05
ELISEO RAMOS-FELICIANO
PATENT EXAMINER